

Appln. Serial No. 10/800,828
Amendment Under 37 C.F.R. § 41.33

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Previously Presented) A method of effecting secure communications between a
2 server and a client, the server executed in a server computer, the method comprising:
3 detecting, at the server computer, a client connection at a first port;
4 providing, by the server computer, the client with a decoy port number; and
5 providing, by the server computer, services to the client on a second port having a second
6 port number that is mapped to the decoy port number, wherein the second port
7 number is different from the decoy port number.

1 2. (Previously Presented) A method as defined in Claim 1, wherein the decoy port
2 number is provided to the client by the operation of a routine that is associated with the server,
3 the routine executed in the server computer.

1 3. (Original) A method as defined in Claim 2, further comprising:
2 launching the server on the second port; and
3 monitoring the second port for a connection by the client.

1 4. (Original) A method as defined in Claim 3, further comprising;
2 if there is no connection by the client within a predetermined time interval, terminating
3 execution of the server on the second port.

1 5. (Previously Presented) A method as defined in Claim 2, further comprising:
2 maintaining, in the server computer, a table of available decoy port numbers that are
3 mapped to valid port numbers.

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1 6. (Previously Presented) A method as defined in Claim 5, wherein the table
2 maintained in the server computer corresponds to a second table maintained at a client
3 computer on which the client is executed, the second table mapping decoy numbers to
4 valid port numbers at the client computer.

1 7. (Original) A method as defined in Claim 6, further comprising:
2 monitoring the second port for a connection by the client, and
3 if there is no connection by the client within a predetermined time interval, terminating
4 execution of the server on the second port.

1 8. (Cancelled)

1 9. (Previously Presented) A computer system comprising:
2 a plurality of ports, each port having a respective port number;
3 a server application; and
4 a routine that, if executed, is operative to:
5 detect a client connection at a first port;
6 provide the client with a decoy port number; and
7 provide services to the client on a second port having a second port number that is
8 mapped to the decoy port number, wherein the second port number is
9 different from the decoy port number.

1 10. (Original) A computer system as defined in Claim 9, wherein the routine, if
2 executed, is operative to:
3 launch the server application on the second port; and
4 monitor the second port for a connection by the client.

1 11. (Original) A computer system as defined in Claim 10, wherein the routine, if
2 executed, is operative to terminate execution of the server application on the second port if there
3 is no connection by the client within a predetermined time interval.

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1 12. (Previously Presented) A computer system as defined in Claim 9, wherein the
2 routine, if executed, is operative to maintain a table of decoy port numbers mapped to
3 corresponding valid port numbers.

1 13. (Original) A computer system as defined in Claim 12, wherein the routine, if
2 executed, is operative to:

3 launch the server application on the second port subsequent to providing the decoy port
4 number to the client.

1 14. (Cancelled)

1 15. (Previously Presented) A server computer system comprising:
2 a plurality of ports, each port having a respective port number;
3 a first server application; and
4 a first routine that is associated with the first server application and that, if executed, is
5 operative to:
6 detect a client connection at a first port;
7 transmit a decoy port number to the client;
8 terminate the connection to the first port; and
9 provide services to the client on a second port having a second port number that is
10 mapped to the decoy port number, the second port number being a valid
11 port number that is different from the decoy port number;
12 a second server application; and
13 a second routine that is associated with the second server application and that, if
14 executed, is operative to:
15 detect a client connection at a third port;
16 transmit a second decoy port number to the client;
17 terminate the connection to the third port; and
18 provide services to the client on a fourth port having a fourth port number that is
19 mapped to the second decoy port number, the fourth port number being

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20 another valid port number that is different from the second decoy port
21 number.

1 16. (Previously Presented) A server computer system as defined in Claim 15,
2 wherein the first routine and the second routine, if executed are operable, respectively, to:
3 terminate execution of the first server application on the second port if there is no client
4 connection within a predetermined time interval; and
5 terminate execution of the second server application on the fourth port if there is no client
6 connection within a predetermined time interval.

1 17. (Previously Presented) A method executed by a client computer, comprising:
2 attempting to access a server application on a first port of a server computer;
3 receiving, from the server computer, a decoy port number that is an invalid port number;
4 translating the decoy port number to a valid port number; and
5 connecting to the server application on the valid port number.

1 18. (Previously Presented) A method as defined in Claim 17, wherein the decoy port
2 number is translated using a wrapper script associated with a client application in the client
3 computer.

1 19. (Previously Presented) A method as defined in Claim 17, wherein the decoy port
2 number is translated using code embedded in a client application in the client computer.

1 20. (Previously Presented) A method as defined in Claim 17, further comprising:
2 mapping the decoy port number to an intermediate port number; and
3 effecting an offset to the intermediate port number to produce the valid port number.

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1 21. (Previously Presented) A computer system comprising:
2 a plurality of ports, each port having a respective port number;
3 an application; and
4 means for effecting secure access to the application by redirecting a client from a first
5 port to a second port, wherein the means for effecting secure access comprises:
6 a routine that, if executed, is operable to provide the client with a decoy port number that
7 maps to a second port number of the second port, wherein the decoy port number is an invalid
8 port number and the second port number is a valid port number.

1 22. (Cancelled)

1 23. (Previously Presented) An article comprising a machine-readable storage
2 medium that comprises instructions that, if executed, cause a server computer to:
3 detect a connection at a first port of the server computer by a client application;
4 transmit, to the client application, a decoy port number, wherein the decoy port number is
5 an invalid port number; and
6 cause a server application in the server computer to be launched at a second port that has
7 a second port number mapped to the decoy port number, the second port number
8 being a valid port number.

1 24. (Original) An article as defined in Claim 23, further comprising instructions, that,
2 if executed, are operable to:
3 monitor the second port; and
4 if there is no connection by the client application within a predetermined time interval,
5 terminate execution of the server on the second port.

1 25. (Original) An article as defined in Claim 23, wherein the storage medium further
2 comprises a table of decoy port numbers that are mapped to valid port numbers.

1 26. (Cancelled)

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1 27. (Previously Presented) A client/server system comprising:
2 a server computer system; and
3 a server application installed on the sever computer system and comprising instructions
4 that, if executed on the server computer system, are effective to:
5 detect a connection at a first port by a client application;
6 transmit, to the client application, a decoy port number, wherein the decoy port
7 number is an invalid port number;
8 terminate the connection on the first port; and
9 provide services to the client application on a second port having a second port
10 number that is mapped to the decoy port number.

1 28. (Previously Presented) A client/server system as defined in Claim 27, further
2 comprising:
3 a client computer system; and
4 a client application installed on the client computer system and comprising instructions
5 that, if executed on the client computer system, are effective to:
6 attempt to access the server application on the first port;
7 translate the decoy port number to the second port number; and
8 connect to the server application on the second port.

1 29. (Cancelled)

1 30. (Previously Presented) A client/server system as defined in Claim 28, wherein
2 the client application further comprises instructions that, if executed on the client computer
3 system, are effective to:
4 map the decoy port number to an intermediate port number; and
5 impart an offset to the intermediate port number so as to derive the second port number.

1 31. (Previously Presented) The method as defined in Claim 1, wherein providing the
2 decoy port number comprises providing the decoy port number that has no meaning to an

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3 unauthorized client computer, but the decoy port number is mappable to the second port number
4 by an authorized client computer.

1 32. (Previously Presented) The computer system as defined in Claim 12, wherein the
2 decoy port number provided to the client enables the client to map, using a second table
3 associated with the client, the decoy port number to the second port number such that the client
4 can connect to the computer system at the second port number.

1 33. (Previously Presented) The computer system as defined in Claim 9, wherein the
2 decoy port number has no meaning to an unauthorized client computer, but the decoy port
3 number is mappable to the second port number by an authorized client computer.

1 34. (Previously Presented) The article of Claim 23, wherein the decoy port number is
2 meaningless to an unauthorized client computer, but the decoy port number is mappable to the
3 valid port number by an authorized client computer.